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ITEC301 – Deliverable 3

USER MANUAL

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Introduction

Background

The latest version of the website developed is for the client of Lindsay Wreford Rennie. The website, DaLindso's Dram Den, is a place that welcomes avid whiskey collectors and tasters. Everyone is welcome to the Dram Den, unless you are under the age of eighteen of course. Upon approaching Lindsay with the idea to expand his side business to the e-commerce world, he provided a succinct list of features he desired to see on the website.

The following are those features that were accommodated in the latest version of the website: The ability to post blogs to voice his opinion on certain whiskies or any news related to such. To be fitted with a dynamic store page which he could, with ease, add, remove and update products whenever he pleases. These two features were stressed by Lindsay to be implemented. The website is filled with many other features, which are discussed further in the remainder of this document.

About This Website

The latest version of the website was developed and designed with the following three technologies: Sublime Text, XAMPP and YouTube.

Sublime Text: Sublime Text is a proprietary source code/text editor, which can be used on either Windows or Apple-based computers. This text editor was utilised to create and modify all the web pages of the website. All source code was typed in the Sublime text editor, including all HTML, CSS, PHP and JavaScript files that make up the website.

XAMPP: XAMPP stands for Cross-Platform (X), Apache (A), MariaDB (M), PHP (P) and Perl (P). This is a free and open-source cross-platform web server solution stack package, which provides all the services one would need to run a website, locally. It provides an environment that allows developers to quickly create a locally available web server for testing and deployment purposes.

YouTube: Prior to the long duration of developing this website, we had basic knowledge in the field of web design. YouTube, the infamous video streaming platform, provided us with apprehension of advanced web design, none of which we have practiced in class.

Basics: Accessing Your Website and Admin

Accessing The Website

http://localhost:81/Final%20Website/PHP/HomePage.php

The Home page is the beginning of any website. Any user arriving at this site will be directed to this page. The Home page is divided into four horizontal sections, from top to bottom: welcome, featured products, quick links and the newsletter section.

Welcome: Here two links are provided, one that takes the user to the Store page and the other which takes the user to the About Us page.

Featured Products: Any and all products which are in a state of 'featured' will be displayed here for all users to browse. The featured products should be any new or rare whiskies, but is determined by the admin.

Quick Links: Similar to the Welcome section mentioned above, two links are provided along with a respective description of such. The first link takes the user to the Store page and the other which takes the user to the Blog page.

Newsletter: The final section is where any user interested in receiving emails related to whisky and promotions from the website will be able to subscribe to the newsletter. The users are only required to provide their first name and email address to be subscribed to the newsletter.

http://localhost:81/Final%20Website/PHP/register_form.php

This link can be accessed from the Home page, by clicking on the section of the navigation bar that is labelled 'SIGN IN/UP', at the top of the website. Here the user, who is not signed in yet, can be granted access to become a customer or admin user. This page consists of two sections: Sign In and Sign Up.

Sign In: If the user already owns an account with the website, they can use the Sign In section to gain access to their customer or admin user privileges for the site. These privileges include the 'PROFILE' section for both the customer and admin users. The admin user is the only user who will have access to the Controls page, which is the Admin Area.

Sign Up: If the user is new to the website and does not own an account yet, they can create one by using the Sign Up section. Here the user will need to provide personal information to construct their account. Once the user has provided all their details in a manner which is valid to the website, they will be granted access to the website as a customer user.

The Admin Area

The Admin Area is known as the Controls page for this website. This page is only accessible to the admin user. Here the admin will be presented with four tabs: Store, Blog, Orders and Stock. Each one of these tabs are discussed below.

Store:

Here the admin can willingly perform all the necessary functions in relation to updating and maintaining all the products which will be displayed on the Store page. Four buttons are provided: Get, Add, Update, Remove. These four buttons are self-explanatory, but brief descriptions are given below in-case you do not follow.

Get: Any product which is stored within the database can be extracted by using this button. All the admin is required to provide is the automatically generated code of the product. The product code will be used to locate the associated product within the database and display its information for the admin to view.

Add: Whenever a new whiskey needs to be added to the website store, it will be done through here. The admin will need to fill all the relevant fields to store the new product in the database. Once the product has been successfully added to the database, this now newly added product will reflect on the Store page.

Update: In the event that a whiskey brand or name has changed, the admin will need to make corrections to the already added product. This is performed in the same regard as the Add button. All the necessary fields will need to be filled to a degree that satisfies the website. The updated product will still use the same product code prior to the update.

Remove: In the event that a whiskey is discontinued or pulled from the market, the admin will need to remove it from the website. The admin only needs to provide the product code in order to completely remove the product from the current stocked whiskies.

Blog:

This tab is similar to the Store tab in more ways than one. Here the admin can willingly perform all the necessary functions in relation to adding and updating all the blog articles which will be displayed on the Blog page. Four buttons are provided: Get, Add, Update, Remove. These four buttons are self-explanatory, but brief descriptions are given below in-case you do not follow.

Get: Any blog article which is stored within the database can be extracted by using this button. All the admin is required to provide is the automatically generated code of the article. The article code will be used to locate the associated article within the database and display its information for the admin to view.

Add: Whenever a new article needs to be added to the website for users to read, it will be done through here. The admin will need to fill all the relevant fields to store the new article in the database. Once the article has been successfully added to the database, this now newly added article will reflect on the Blog page.

Update: If there is ever a reason for an article to be modified, it will be performed through this button. This is performed in the same regard as the Add button. All the necessary fields will need to be filled to a degree that satisfies the website. The updated article will still use the same article code prior to the update.

Remove: If the admin is not satisfied with an article or it is no longer valid, there is an option to remove such from the website. The admin only needs to provide the article code in order to completely remove the article from the current list of blog posts.

Orders:

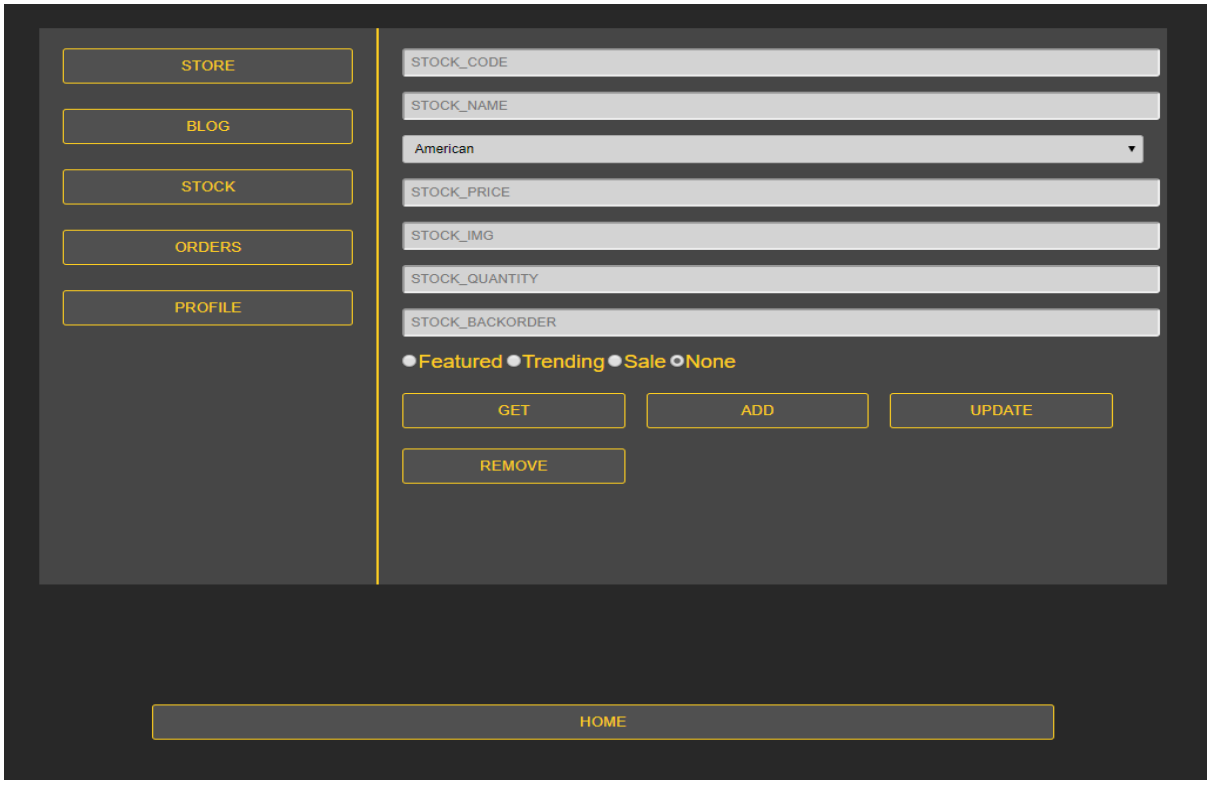
This is the tab where the admin will be able to oversee the orders made during the day. From here the admin can set up deliveries for any stock purchased. Each order is provided with the associated address, so the admin will have everything they need to place deliveries.

Stock:

Here the admin has the ability to oversee all the details regarding currently stocked products. The table that is used to store the products details is displayed in this section. This will mainly be used to view product codes and quantities.

Admin Area pages:

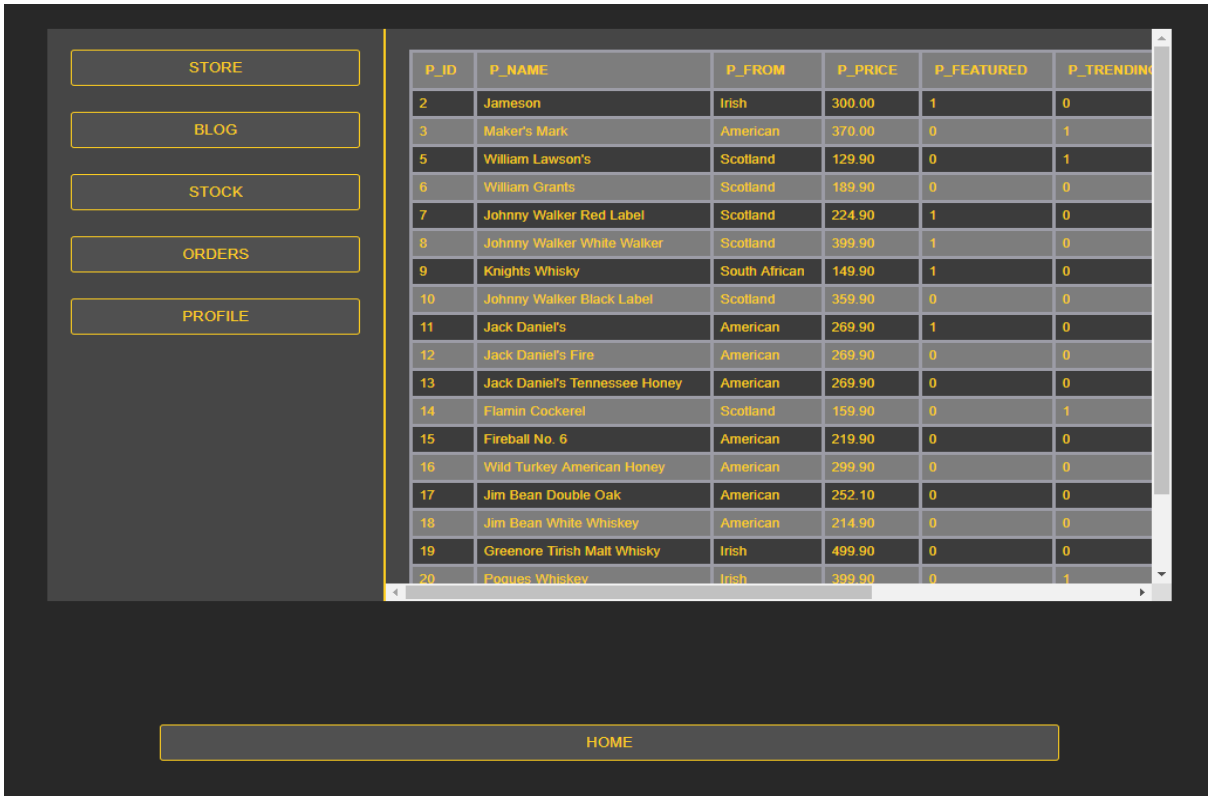
Store:



Blog:

Orders:

Stock:



Products: Adding, Removing and Updating Products

Adding and Removing Products

Adding a product

This action can only be performed by the admin from the Admin Area. Whenever a new product is to be added the admin must provide all the appropriate information that is required from the website. The required information for each product is bulleted below:

- Name
- Origin
- Price
- Image File Location
- Featured?
- Sale?
- Trending?
- Quantity
- Backordered

Once all the above-mentioned information has been entered into their respectively labelled text fields, they will need to be validated by the website before it can be added as a new product. The validation process consists of three steps, which are summarised below:

Blank fields: All the relevant text fields for adding a product to the database will first be checked to determine if any of the fields were left empty. If any relevant field is left empty, the website will generate an appropriate error message for that specific empty field.

Valid datatypes: Once it is determined that each text field has some data within it. The second step is to ensure that the data entered is correct. This simply means checking the fields to ensure that the data corresponds with the text field's purpose. Example, letters or special characters do not belong in the 'Price' field, only numbers should be present here. If any field is not valid, the website will generate an appropriate error message for that specific invalid input.

No duplicates: This is the last step in the validation process. No products within the database can have the same name, if the admin tries to add a product with a name that exists in the database the product will be denied. An error message will be displayed informing the admin that it already exists within the database.

As one more safeguard before adding a product, the SQL statement which is used to insert the values within the appropriate table will be 'prepared'. This is a term used to determine if a user is trying to perform an SQL injection attack on the website, of course, this would only be necessary in the event that a user with malicious intent was granted access to the Controls page. Once the SQL is proven to be legitimate, the product is finally added to the database to be displayed on the Store page.

Removing a product

If there is ever a need to completely remove a product from the website, it can be performed via the Admin Area. All the admin is required to provide is the product code and click on the “DELETE” button. There is nothing much to it, be warned that the website does not provide a prompt message before complete deletion.

Updating Products

This action can only be performed by the admin from the Admin Area. Whenever an existing product requires modification the admin must provide all the appropriate information that is required from the website, even if certain pieces of information are not being altered. The admin should retrieve the product in need of modification by utilising the “GET” button; explained above. The required information for each product is bulleted below:

- Name
- Origin
- Price
- Image File Location
- Featured?
- Sale?
- Trending?
- Quantity
- Backordered

Once all the above-mentioned information has been entered into their respectively labelled text fields, they will need to be validated by the website before it the existing product can be updated. The validation process consists of three steps, which are summarised below:

Blank fields: All the relevant text fields for updating a product will first be checked to determine if any of the fields were left empty. If any relevant field is left empty, the website will generate an appropriate error message for that specific empty field.

Valid datatypes: Once it is determined that each text field has some data within it. The second step is to ensure that the data entered is correct. This simply means checking the fields to ensure that the data corresponds with the text field’s purpose. Example, letters or special characters do not belong in the ‘Price’ field, only numbers should be present here. If any field is not valid, the website will generate an appropriate error message for that specific invalid field.

No duplicates: This is the last step in the validation process. No products within the database can have the same name, if the admin tries to update a product with a name that exists in the database the update request will be denied. An error message will be displayed informing the admin that it already exists within the database.

As one more safeguard before updating a product, the SQL statement which is used to update the values within the appropriate table will be ‘prepared’. This is a term used to determine if a user is trying to perform an SQL injection attack on the website, of course, this would only be necessary in the event that a user with malicious intent was granted access to the Controls page. Once the SQL is proven to be legitimate, the product is finally updated to be displayed on the Store page.

Changing Menus

The navigation bar changes depending on which type of user is using the website. There are three categories of user: visitor, customer and admin. The visitor user is a user that has yet to sign into their account, if they own one. They ae presented with the default navigation bar. Once the visitor user has signed into their account the navigation bar will change in two ways:

- The 'PROFILE' section will appear, which will allow the now customer or admin user, to view all their profile information.
- The default 'SIGN IN/UP' section will be changed to show 'LOGOUT'. When this newly changed sectioned is clicked the user will be signed out and take on the state of a visitor user once more.

Shipping Options

There are no direct shipping options for a user purchasing products available at checkout. This user does not make such decisions. The admin will determine how the products will be delivered based on the purchasing user's address. The admin will mainly use DHL Express to make deliveries or any other equivalent courier service. All shipping is free; the shipping cost has been implemented into the cost of the products being sold. The rate is five percent mark-up, for shipping alone.

The Front Page: Adding and Changing Images

The front page (Home page), contains what is known as a 'carousel', which is used to showcase all the featured products on the website. The admin determines which products are to be in a state of featured. These images can be changed via the Admin Area using the 'STORE' tab. Here the admin can update an existing product to be saved in a featured state. Once product has been updated this way, it will reflect in the carousel. The exact opposite could be done too, removing the featured state from a product, will mean that specific product will no longer show within the carousel on the front page

Orders

The processing of an order starts with a customer or admin user selecting the products which they wish to purchase by clicking on the products associated '+ add to cart' button. Each product selected will be added to their cart, which is located below the browsing products section. Once the user is happy with their selected products they may proceed to the bottom of the Store page to change the quantity of their selected products within their cart. It is important to note that a user will only be able to purchase products if they have added their address and payment details within the 'PROFILE' section.

After it is determined that the user has provided their address and payment details, they will be able to purchase the products within their cart. Once the user has clicked the 'PURCHASE' button an alert message will appear with the caption, "Thank you for your purchase!", what follows is the actual processing of the order.

The process incorporates the use of three tables: trans_tbl, sold_items_tbl and products_tbl.

trans_tbl: This table is used to store which user made a purchase at what time and the total amount of the purchase.

sold_items_tbl: This stores a more detailed version of the purchased products. It separates the order into the individual products purchased.

products_tbl: After a successful purchase the quantity of the products purchased will need to be updated to reflect the decrease of stock.

Any orders processed between 21:00 of the current day and 21:00 of the previous day will be displayed within the 'ORDERS' tab of the Controls page for the admin to finalise. At the end of each day the admin will log on to the website and check the orders that were made that day. They will then take down who bought what and where it needs to be delivered. Each order will be displayed in a tabular format, including the customer's name, address and purchased products.

Updating A Page On Your Site

In addition to the changing featured product images on the Home page. There are two other areas where the pages could be updated: The Store and Blog pages:

Store page: Whenever a product is added, updated or removed from the database it will reflect on the Store page. The Store page is updated along with the products within the database because all the products displayed on the Store page are retrieved form the database.

Blog page: This page is updated just like the Store page, the articles displayed on the website are retrieved from the database so any updates reflected by the admin will be shown on the Blog page. The admin can even change the entire story of the article which would, in essence show an entirely new page to an unaware user.

Adding new pages to the website would suggest that new features would need to be developed and deployed onto the existing website. The web designer will keep a copy of the latest version of the website to use as a testing environment for the new feature. Once this feature has been tested successfully and is ready to be deployed, the website will be shut down for a small duration of time for maintenance. During this time the web designer will upload the new website with the extra features to the sever for users to access and explore.

Collecting Money from The Store

The owner of the website, Lindsay Rennie, will need to provide us with a bank account which will be used solely for this website. All purchase order money will be sent straight to this bank account. This account will be used for any running costs of the website, including extra staff, if needed in the future.

Checking Web Traffic and Statistics

According to (Jones, 2018), Google Analytics is an excellent web traffic analysis tool. It allows you, in real-time, to view what your users are interested in, by generating a 'hot-spot' overlay of any web page. This overlay tracks the movement of the user's cursor to see where they are usually pointing. Google Analytics can also keep record of how many users visit your site per day, how many create accounts and make purchases. The features are endless with this tool. If any website wants to succeed and make it out as one website that is 'well-known' they will use a web traffic analysis tool to aid them in doing so.

Appendix

The website can be setup on a remote server that is owned by a third party; GoDaddy. We recommended the 'Economy' package offered by GoDaddy, which is a web hosting service. Here all the maintenance of the hardware required for the website will be taken care of by the third party and will not be an issue or worry for the owner. The web designer will still need to maintain the actual website, but their job will have less overhead since the server maintenance is outsourced.

The above would be the most ideal. There is a second option where the client purchases his own web server and pays someone to maintain it. Here the server will either be kept in the client's house or in a rented building. This will be more expensive as servers can be quite costly, not to mention the client will now be paying for a web designer and web server administrator. The smart decision would be to choose the first option.

References

Jones, M., 2018. *Google Analytics Interface 101: A Beginner's Guide to Understanding Google Analytics.* [Online]
Available at: https://themeisle.com/blog/google-analytics-interface-explained/
[Accessed 10 August 2019].